

Applic. No.: 09/655,091  
Response Dated July 16, 2007  
Reply to Office action of April 23, 2007

REMARKS/ARGUMENTS

Reconsideration of the application is requested.

Claims 1-4, 7-10, and 15-20 remain in the application. Claims 5-6 and 11-14 have been previously cancelled.

In item 3 on pages 5-8 of the above-mentioned Office action, claims 1-4, 7-10, and 15-20 have been rejected as being unpatentable over Gluntz et al. (US 5,596,613) under 35 U.S.C. § 103(a).

As will be explained below, it is believed that the claims were patentable over the cited art in their original form and the claims have, therefore, not been amended to overcome the references.

Before discussing the prior art in detail, it is believed that a brief review of the invention as claimed, would be helpful.

Claim 1 calls for, inter alia:

a condenser disposed in said interior space;

a condensing pipe leading into said condensing chamber for enabling overflow of vapor in the condensing chamber;  
and

a drain pipe for noncondensable gases, said drain pipe disposed in said interior space and fluidically connecting said top region of said pressure chamber to

Applic. No.: 09/655,091  
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said condensing chamber, said drain pipe defining a direct connection to said condensing chamber, and said drain pipe not connected to said condenser, said drain pipe having an upper end disposed at a level above said condenser and a bottom end immersed into said cooling liquid.

Claim 2 calls for, inter alia:

a condenser disposed in said pressure chamber;

a region around said condenser;

a condensing pipe leading into said condensing chamber for enabling overflow of vapor in the condensing chamber;  
and

a drain pipe for noncondensable gases, said drain pipe fluidically connecting said region around said condenser to said condensing chamber, and said drain pipe having a top end disposed above said condenser, and said drain pipe defining a direct connection to said condensing chamber, and said drain pipe not connected to said condenser, said drain pipe having an upper end disposed at a level above said condenser and a bottom end immersed into said cooling liquid.

Claim 17 calls for, inter alia:

providing a condenser in the interior space;

enabling an overflow of vapor in the condensing chamber by a condensing pipe leading into the condensing chamber;  
and

automatically drawing off noncondensable gases from a region above or around the condenser by a drain pipe leading into the condensing chamber, the drain pipe not connected to the condenser, the drain pipe having an upper end disposed at a level above the condenser and a bottom end immersed into the cooling liquid.

Applicants would like to emphasize, as already explicitly or at least implicitly pointed out several times before, that the present invention has two elements for carrying off media,

Applic. No.: 09/655,091

Response Dated July 16, 2007

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namely the condensing pipe (14) on one hand and the drain pipe (22) on the other hand. In contrast, Gluntz et al. have only one single element, namely the flow channel 27. Although both the condensate and the noncondensable gases may be drained by the flow channel 27 and could thus reach the condensing chamber, it is noted that exactly due to this reason both components (condensate and noncondensable gases) overflow into the condensing chamber together through the flow channel 27. This is exactly what the present invention, which uses two different pipes for the components, should avoid. It is ensured by the present invention that on one hand an unhindered, early and possibly complete transfer of the noncondensable gases into the condensing chamber is possible without the pipe being clogged by the overflowing condensate, and on the other hand the condensate flow into the condensing chamber can also take place unhindered. This cannot be achieved at all by the system of Gluntz et al. because, as commented by the Examiner, the two components (condensate and noncondensable gases) are transported together by the flow channel 27.

The two different pipes differ structurally especially through the positioning of their inlet region: while the inlet of the condensing pipe (14) is clearly under the condenser (16) and thus is located in the lower interior space of the

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containment, the inlet of the drain pipe (22) is located above the condenser (16). It is, exactly though this structure, ensured that the noncondensable gases, which concentrate in the upper interior space of the containment, can be carried off into the condensing chamber (4) through the drain pipe (22) targetedly and unhindered by the condensate.

As a result, this means that a person skilled in the art, in order to reach the present invention from Gluntz et al., must targetedly extend the flow channel 27 in such a way that its inlet region would be located in the upper interior space of the containment. However, such a modification would not be motivated or suggested because in Gluntz et al. the condenser is not even in the containment and such a modification would not make any sense.

Clearly, Gluntz et al. do not show a condenser disposed in the interior space, a condensing pipe for enabling overflow of vapor, and a drain pipe, having an upper end disposed at a level above the condenser, for noncondensable gases, as recited in claims 1-2 and 17 of the instant application.

Claims 1-2 and 17 are, therefore, believed to be patentable over the art and since all of the dependent claims are

Applic. No.: 09/655,091  
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ultimately dependent on claims 1, 2 or 17, they are believed to be patentable as well.

In view of the foregoing, reconsideration and allowance of claims 1-4, 7-10, and 15-20 are solicited.

In the event the Examiner should still find any of the claims to be unpatentable, counsel would appreciate a telephone call so that, if possible, patentable language can be worked out.

If an extension of time for this paper is required, petition for extension is herewith made. Please charge any fees which might be due with respect to 37 CFR Sections 1.16 and 1.17 to the Deposit Account of Lerner Greenberg Stemer LLP, No. 12-1099.

Respectfully submitted,

For Applicant

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